

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

COMMENTS OF SIEMENS

**I. SIEMENS USA – COMMUNICATIONS AND IDENTIFICATION
SEGMENT**

A. For the past 160 years Siemens has innovated and invented many technologies to support American industry. In just the past 15 years Siemens has invested approximately \$40 Billion in the US, invests more than \$1 Billion in research and development, and spends over \$50 million a year to train and invest in its workforce of over 50,000 employees in the US. Siemens has led efforts to bring AeroMACS to the marketplace over the past 3 years and continues to invest in the AeroMACS technology not only in the US, but globally as well. Siemens has worked very closely with the Federal Aviation Administration (FAA) and its partners to deliver the highest quality and most reliable AeroMACS products to support the Airport Surface Surveillance Capability (ASSC) ground infrastructure at over 10 airports to date and more airports currently being deployed only in United States and many others around the world.

II. ELIGIBILITY (NPRM ¶ 38)

A. The Commission's eligibility rules should encourage the robust deployment of AeroMACS services to allow for a more efficient and reliable experience for not only the airlines and airport services, but for the passengers that travel daily.

B. The current proposed rules would preclude many important stakeholders from using AeroMACS unless the airport owner or operator consents. In effect, airports would become the gatekeepers of AeroMACS services.

1. The Commission traditionally seeks to remove barriers to access to wireless services. Siemens strongly encourages that the commission take a similar approach in the service rules applicable to AeroMACS. By adopting expanded eligibility rules, the Commission will remove the barriers to AeroMACS services and ensure that all interested stakeholders will have access to channels in the AeroMACS band. This is an important step to allow access to this technology and service that Siemens feels is a critical point that the commission should adopt.

III. CHANNEL MANAGEMENT (NPRM ¶ 40)

A. Siemens is in strong support of the commission designating a single, nationwide channel manager and feels that this is the best way to ensure the consistent, efficient and fair management of AeroMACS channels.

1. A channel manager will ensure nationwide consistency for access to AeroMACS spectrum.

a. A channel manager will save eligible users time and money that otherwise would be spent negotiating different allocation and interference procedures at each airport.

b. Use of a single, nationwide channel manager will provide AeroMACS users with one point of contact regardless of the airport at which they are operating.

2. The channel manager will maximize the efficient use of spectrum, enabling AeroMACS to meet the unique needs of each location.

a. Communications needs vary from airport to airport based on several factors, including an airport's size and the region of the country in which the airport is located. The channel manager will allocate channels between non-Federal AeroMACS users to maximize efficient use of the spectrum at each airport.

b. The channel manager also will help coordinate AeroMACS spectrum access with federal users. This coordination will ensure the efficient use of AeroMACS spectrum by employing sharing approaches tailored to the needs of the federal and non-federal AeroMACS users at each airport.

3. A channel manager will ensure fair management of AeroMACS channels.

a. Under the rule proposed by the WiMAX Forum, the channel manager will make its services available on a non-discriminatory basis to all eligible AeroMACS users.

b. To further ensure fair management of AeroMACS channels, the FCC should designate as channel manager an entity that is: impartial; an expert in AeroMACS technology and applications; and a non-profit.

IV. COORDINATION WITH OTHER AUTHORIZED USERS (NPRM ¶¶ 41-43)

A. Siemens supports and believes that a designated channel manager will help promote coordination with other authorized users of the band. This effort will also ensure that the band is fully utilized by both the FAA and other parties such as airlines and airports to improve safety and efficiency in the airline industry.

1. The NPRM seeks comment on how to promote coordination between AeroMACS users and other authorized users of the band, specifically Globalstar and operators of flight test systems.

2. The channel manager approach will promote such coordination. The channel manager will serve as the single point of contact for non-Federal AeroMACS users should any coordination issues arise with these other authorized users of the band.

V. LICENSING AND COORDINATION (NPRM ¶¶ 37, 39)

A. Siemens would encourage a flexible licensing and coordination rules that will promote robust deployment of AeroMACS services and applications.

B. Siemens believes that the current proposed licensing rules would impose unnecessary and onerous costs on AeroMACS users that will constrain the deployment of AeroMACS.

1. The proposed requirement for individual licensing of fixed, base and mobile AeroMACS units is unnecessary and onerous.

2. The location information gained from such an individual licensing regime will already be available with the channel manager, who will use such information in coordinating the use of AeroMACS spectrum at each airport. A requirement for users to also make this location information available through the FCC's Universal Licensing System is duplicative and administratively burdensome.

3. The NPRM suggests that this information must be readily available to the Commission. To the extent this information is ever needed by the Commission, it will be available with the channel manager.

4. Rather than requiring such an onerous individual licensing regime, AeroMACS operations should be licensed by rule. Such an approach would be more administratively efficient and will encourage robust deployment and availability of AeroMACS services and applications.

C. Siemens believes that the proposed coordination rules similarly would impose unnecessary delays and costs on AeroMACS users.

1. The proposal to require pre-coordination of AeroMACS deployments with FAA Regional Offices will impose significant and unnecessary delays and costs on AeroMACS users.

2. Coordination with federal AeroMACS users will be performed by the channel manager. Indeed, one of the channel manager's central roles will be to coordinate AeroMACS spectrum use between federal and non-federal users.

3. Rather than impose a coordination requirement that is duplicative of the coordination that will necessarily be performed by the channel manager, the Commission should reject a pre-coordination requirement on individual licensees. Coordination by the channel manager will be more efficient and expedient.

VI. TECHNICAL RULES (NPRM ¶ 44)

A. The international nature of AeroMACS services requires the adoption of technical rules that mirror those standards approved by international technical standards bodies. Siemens would like to encourage the FCC to adopt the proposed technical rules based on the requirements currently incorporated in the International Civil Aviation Organization Standards and Recommended Practices and in the RTCA Minimum Operational Performance Standards.

VII. CONCLUSION

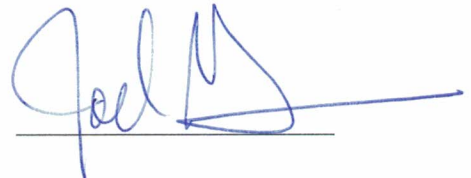
Siemens would like to urge the commission to designate a single Nationwide channel manager for the coordination of the existing and currently under utilized AeroMACS spectrum. If the commission would designate a single channel manager Siemens feels that it would be the best possible solution to ensure that AeroMACS can be quickly deployed and the most effective way to manage the AeroMACS spectrum.

Siemens would like to thank the commission for taking the time to consider our position on the topic.

Respectfully submitted,

JOEL GREEN
DIRECTOR OF WIRELESS BUSINESS DEVELOPMENT
SIEMENS INDUSTRY, USA
425-318-2834
JOEL.GREEN@SIEMENS.COM

By: _____

A handwritten signature in blue ink, appearing to read 'Joel Green', is written over a horizontal line.

September 26, 2019